



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,392	08/27/2003	Katsuhiko Yamaguchi	10517/179	4595
23838	7590	09/28/2005	EXAMINER	
KENYON & KENYON 1500 K STREET NW SUITE 700 WASHINGTON, DC 20005			BOTTORFF, CHRISTOPHER	
			ART UNIT	PAPER NUMBER
			3618	

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/648,392

Applicant(s)

YAMAGUCHI ET AL.

Examiner

Christopher Bottorff

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 11-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 9 and 10 is/are rejected.
- 7) ☒ Claim(s) 4, 5 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/27/03, 11/4/03, 4/2/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of the apparatus of invention I and the species of apparatus associated with Figures 1 and 2 in the reply filed on July 22, 2005 is acknowledged. The traversal is on the grounds that the designation of species 2 as being associated with Figures 6 and 7 is inappropriate. This is not found persuasive.

Applicants allege that the control flow chart shown in Figure 2 can be applied to the hybrid mechanism shown in Figure 7. The Detailed Description of the Drawings section of the specification could be interpreted to support Applicant's view, but the Brief Description of the Drawings contradicts this view. The Brief Description of the Drawings indicates that there are two distinct embodiments. The first embodiment relates to Figures 1 and 2 alone and the second embodiment relates to Figures 6 and 7 alone. The examiner's designation of the species is consistent with the Brief Description of the Drawings and is appropriate.

The requirement is still deemed proper and is therefore made FINAL.

Claims 6 and 11-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species of a nonelected invention, there being no allowable generic or linking claim.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statements (IDSs) submitted on August 27, 2003, November 4, 2003, and April 2, 2004, were considered by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoyama et al. US 6,026,921.

Aoyama et al. disclose a hybrid vehicle comprising an internal combustion engine 2, a motor 4 which can output power to a driving shaft coupled with an axle, and an electric power storage device/means 15 which can store electric power obtained by converting at least part of power from the internal combustion engine to electric power and can supply the electric power to the motor. See Figure 1. A required driving force setting controller/means is provided in unit 16 which sets a required driving force required for running according to an operation by a driver. See column 8, lines 18-35.

Art Unit: 3618

Also, a start time controller/means is provided in unit 16 which delays the start of the internal combustion engine after a predetermined time for engine warm up has elapsed since an instruction for starting the vehicle is given by an operator if the required driving force set by the required driving force setting controller/means is equal to or smaller than a predetermined driving force and the vehicle can run using only the motor. See column 8, lines 18-35.

An amount of electric power stored in the electric power storage device/means 15 is equal to or larger than a predetermined value, which is the value of power required to drive the vehicle with the motor, when the vehicle can run using only the motor. In addition, the internal combustion engine 2 is connected to the driving shaft. See Figure 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama et al. US 6,026,921 in view of Kaiser et al. US 5,979,158.

Aoyama et al. do not disclose that the delay in the start of the internal combustion engine is based on the temperature detected by a temperature detecting controller or that the predetermined time is longer than a preparation time necessary for

Art Unit: 3618

making a sensor function properly. However, Kaiser et al. teach the desirability of delaying the start of an internal combustion engine by a start time controller 12 based on the temperature T_k detected by a temperature detecting controller 14. See column 4, lines 18-32. Kaiser et al. further teach the desirability of providing a predetermined time after which the internal combustion engine is started that is longer than a preparation time necessary for making a sensor 4, which is used for operation of the internal combustion engine, function properly. See column 4, lines 28-31.

From the teachings of Kaiser et al., delaying the start of the internal combustion engine of Aoyama et al. based on the temperature detected by a temperature detecting controller would have been obvious to one of ordinary skill in the art at the time the invention was made. This would help to increase the efficiency of the system.

From the further teachings of Kaiser et al., providing the predetermined time after which the internal combustion engine of Aoyama et al. is started such that the predetermined time is longer than a preparation time necessary for making a sensor function properly would have been obvious to one of ordinary skill in the art at the time the invention was made. This would ensure that the sensor is ready to perform when the engine is operating.

Allowable Subject Matter

Claims 4, 5, and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach a

Art Unit: 3618

delay time that is set as required by claims 4 and 5 or a preheating controller as defined in claim 8. These features, in combination with the further limitations of the claims, distinguish the claimed invention over the prior art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shimasaki et al., Kojima, Phillips et al., and Suzuki disclose hybrid vehicle arrangements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Bottorff whose telephone number is (571) 272-6692. The examiner can normally be reached on Mon.-Fri. 7:30 a.m. - 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

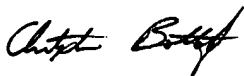
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 3618

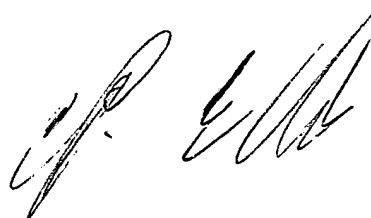
For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher Bottorff



CHRISTOPHER P. ELLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600